

## FOREIGN INTELLIGENCE.

## FRANCE.

A Council of War has assembled at the Tuileries, under the presidency of the Emperor.

It is composed of the following members:—The Emperor, the Prince Napoleon, the Duke of Cambridge, Prince Jerome Napoleon, Lord Cowley, Sir Edmund Lyons, Admiral Dundas, Sir Richard Airey, Sir Harry Jones, General della Marmora, Marshal Vaillant, Count Walewski, General Canrobert, General Bosquet, General Niel, General Martimprey, Admiral Hamelin, Admiral de la Graniere, and Admiral Penaud.

The object of the Council is to collect, to interchange, and consider all possible information with respect to the war in every quarter; but it will not be in the province of the Council to plan campaigns or to decide in the beginning of January what is to be done in April. The Council having deliberated fully on the important subjects which will suggest themselves to them will communicate the results of their labors to their respective Governments, who will discuss the questions which may be raised, and having decided them will give the orders necessary to secure the objects they may have in contemplation.

## GERMAN POWERS.

A telegraphic despatch from Berlin declares that Count Nesselrode has confidentially declared to M. De Seebach that, in his opinion, Russia had made, in her declaration of the 22nd December, the furthest concession that she could make.

The Vienna correspondent of the *Frankfort Post Gazette* writes on the 1st ult.:—"The hope of peace raised by Count Esterhazy's mission has suddenly disappeared. No one knows why. The accumulation of large bodies of troops in Bessarabia is regarded as a proof that Russia will energetically oppose any diminution of territory."

## RUSSIA.

Private St. Petersburg advices of 29th December mention Esterhazy's arrival, and the question of an ultimatum was the subject of universal talk and of all kinds of rumors. It was understood that no answer was to be given for fifteen days, and a Council of the Empire was to be appointed to examine and discuss the propositions. These letters confirm the disfavor with which Austria, at the present time, is professedly regarded. All classes, even including the peasants, indulge in invectives and sarcasms against her. The activity of the overland transit trade is said to have increased; and, owing to the extraordinary number of horses employed in bringing imports from the Russian frontier, the carriage back from St. Petersburg to Kowno had fallen to £6 per ton for hemp, flax, and tallow. Government had contracted for 3,000 tons of lead; its price had greatly fallen. This article and sulphur were imported through Prussia, with no apparent interruption, to the astonishment of the Russians. Some of the principal merchants expect that the overland trade must at last be stopped. Weather very mild. Goods were being sent to Archangel, in hopes of shipment, before the arrival of the blockading ships in the Baltic. Navigation has been resumed at some points. A steamer was to leave Travamunde for Revel on December 30th, and take goods thence to Libeck.

The *Times* expects from Russia neither a refusal nor an acceptance, but such a modified counter-proposition as may give rise to negotiations and enable her to play off upon us the devices of another mystification and another conference; but the *Times* trusts that such insidious overtures will be peremptorily refused.

At St. Petersburg the pacific opinion reigns in society, but it is in the minority among the masses. This division exists around the Emperor, and even in the midst of the imperial family. The Empress's mother desires the end of the war, and loses no occasion for recommending peace. The reigning Empress inclines more to the side of war. The Emperor has not declared himself. It is believed that he hesitates before the immense responsibility of the decision which is expected from him.

Among the operations designed for the ensuing season, it appears that there is to be another "grand" campaign in the Baltic—(everything is to be on a "great" scale for the future)—and British journalists favor us with an imposing account of the immense naval preparations of England for this expedition. Possibly; yet Russia is anything but overwhelmed by the intelligence. The Czar coolly orders new fortifications at every defensible point of the coast, and waits to enjoy the spectacle of England and France squandering a few more millions in vain. As for England, indeed, the Russian journals regard her share in the business with amusing disdain. *Le Nord*, speculating upon the proposed expedition, makes this stinging allusion to the glorious British Empire:—"As we see, the frosts of the north have their own little special advantages. Then, again, Russia possesses at this moment one army in Finland, another in the Baltic provinces, a third in Poland, and yet a fourth in St. Petersburg and its neighborhood. Surely these are obstacles not to be surmounted in a hurry, nor can any one dream of doing so. In any case it will not be English troops that can do it. It will hence be on the shoulders of the French army that Great Britain would once again lay all the burthen of this fresh expedition. Now we are of opinion that the French government, a better judge than England of everything connected with military operations, would look twice before it ventured on so difficult and formidable an enterprise. It seems to us besides that the French have been for two years doing England's work for her, and paying dear enough for her alliance, not to consider themselves completely out of her debt."—*Nation*.

## SWEDEN.

PREPARATIONS FOR WAR.—The Swedish journal *Fredningsbladet* reports, under date Stockholm, December 24th:—"Activity unexampled reigns in every manufactory for producing articles necessary to the equipment of an army. The colonels of all the regiments have received orders to supply their troops with everything necessary to prepare them for marching at the first signal. The order was given secretly, but it was in its nature impossible of concealment. All leaves of absence to officers are refused. Everybody here believes that in case the allies should open the war with vigor in the Baltic next spring, our government will feel itself compelled to take an active part therein."

SARDINIA AND ENGLAND.—A letter from Genoa, of January 2, in the *Constitutionnel*, says:—"Preparations making at the Royal Palace at Turin lead to the belief that his Majesty Victor Emanuel, yielding to the representations of his councillors, has decided to contract a marriage, the political results of which will be of the highest importance. We do not know whether or not there may be any mistake in the interpretation of the preparations going on at the Palace, but if his Majesty should act upon the desires of his ministry, his marriage will be the result of his recent visit to London."

NEW VERSION OF THE REDAN AFFAIR.—A pretentious work has just appeared, a large octavo volume, which was expected to make a noise, and ought to do so, considering the hubbub of the advertisements about it, entitled "Inside Sevastopol." Its chief feature was announced as being a new, and the only true, version of the affair at the Redan; and certainly as now given by the author (name unknown), who gathered it from various spectators of and participants in the transaction, it wears an aspect far more discreditable than had been suspected, even after the first accounts, as to the muddling in the trenches, refusal of officers to lead, and of men to be led, and all the rest of it. Why these first accounts were subsequently attempted to be explained away has never been understood; but it would appear that they fell infinitely short of the disgraceful reality, and that the excuses offered only deepen the contempt of the French for the authors of the disaster and those who would extenuate it. The author is rather chary of giving names of officers incriminated, and even regiments principally obnoxious to censure he leaves blank; but he is minute and circumstantial enough as to the nature of the deplorable blundering, and as to the exhibition of a peculiar motion that is happily rarely displayed by British soldiers in face of an enemy. It would seem that there is an entire misconception in this country as to the character of the assault on the Redan. The work was easily enough carried in the first instance, there being exceeding few Russians in it—not above thirty! Their fire was very feeble; the storming party, consisting of 500 men, ran along the open space easily enough, and with small loss, all the talk about being mowed down wholesale being mere balderdash, as applied to the first part of the operation, though true enough as regarded the fatal finale. Entering the Redan was a facile operation:—That done, two divisions of the supports were marched out of the trenches; there was nothing to oppose them:—except a few dropping shots inside, all was silent as the grave. When, however, they got half-way between the trenches and the Russian work a pance seemed to seize them. They did not run away, but stood still. "We saw," says one of the author's military informants, (himself and officer) describing the occurrence on the spot, "we saw their officers trying to excite them by voice and gesture to advance. Some even took hold of their coats, and tried to start them, as you would to start a jibbing horse. It was all in vain:—they would not move. The men who were inside called to them to come on, and told them there was no one there; but it was no use; they stood still. Meanwhile, Windham could not get his 500 men to charge: had they done so, the Russians were in such small force, that even with that considerable body of troops, he would have driven them down the hill, and found time to turn the guns cityward. As to spiking the guns, he did not want to do that; he wanted them to defend his position. The moment of victory passed away. The Russian supports came up in vast numbers:—instead of finding 5,000 Englishmen on the top of the hill, protected by the Russian guns, now turned upon their former owners, the Russians found only the 500 who had first got in, and those engaged in desultory sharpshooting with the scanty garrison which lurked among the traverses. The fresh army of enemies did what we ought to have done; they charged with the bayonet, drove the remnant of our 500 towards the parapet, and recovered the guns. These were now turned with murderous effect on the poor panic-stricken devils who were standing irresolute between the trenches and the fort. They turned round and ran back into the trenches, already full of the men who were to have supported them. After this the confusion was hopeless. Regiments got all mixed together, and no officer could find his men or men their officer. It was then that Windham said 'Send me no more men; unless you can send an army forth officered and disciplined.' The few brave straggling parties that came out were only a useless sacrifice of the good men. Then the shot and shell came over into the crowded trenches; and the poor innocent babies, who didn't know a bayonet for a musket, and were no more fit to act soldiers than parsons, were cut up by balls and splinters, and were got out as quickly as possible."

This volume explains, for the first time, at least to the public ear, why our Allies have been so censorious as to the Redan, and why it has required strong official interference from imperial quarters to prevent that censure being a good deal more marked and

dangerous than happily it has yet become. Tender topic this to touch upon, but one remarkably inviting, nevertheless, as improper things so generally are. Contrary to the impression universally prevalent here, the attack on the Redan was in no way a feint, except in the bitter pleasantry of the faint-heartedness that distinguished it. So far from its being intended for "a diversion of the Russians while the French assailed the Malakoff," it was an integral part and parcel of the same operation, and essential to its completion. Because the attack on the Redan failed, and failed so ignominiously the capture of the Malakoff led merely to the possession of the "blood stained ruins" of South Sebastopol, which cannot even be retained because of the dominating fire of the north forts; whereas, had the English succeeded, the whole garrison must have laid down their arms, or been destroyed:—there was no possibility of escape. This is shown in the volume clearly to be the case; but it is not so shown by any *ex post facto* evidence. It appears it was well understood at the time, entered into Pelissier's calculations, and his arrangements were planned in accordance with the supposition that the Redan would be carried. So entirely was this the case that the Marshal, who, from his position at the Malakoff, could see our repulse at the Redan, no sooner observed the Russians begin to retreat across the harbor, than he sent word to that effect to Simpson, clearly an invitation, if not a good, to the renewal of the assault. But Simpson was too intent on his toothache, or lumbago, or tic douloureux, or chilblains, or chicken-pock, or whatever-to-be-coddled complaint was the matter with him; and remained deaf as a gurnet to the summons. Gortschakoff got off and we all know what has come on since. The author assures us that not only is this the conviction of every British officer competent to form, and candid enough to express an opinion, but he adds:—"I have spoken to at least twenty Frenchmen on the same subject. They will subscribe to any theory, and join in any compliment to the British arms; they will even politely deplore the freedom with which our generals are criticised by our press; but they are always faithful to two impressions—first, that there were great faults committed on the 8th of September; and, secondly, that if the Redan were taken simultaneously with the Malakoff, the Russian army must have capitulated or been destroyed."—*Correspondent of the Liverpool Albion*.

## SECOND LECTURE ON ASTRONOMY.

BY MR. EDWARD MURPHY, BEFORE ST. PATRICK'S SOCIETY.

(From the Pilot.)

Mr. Murphy delivered his second lecture on Astronomy, on Monday evening, January 21st, at St. Patrick's Hall. His subject for the evening was "Comets, Eclipses, Tides, the Laws of Attraction of Gravitation, and a brief survey of the Sidereal Heavens." After a brief review of the preceding lecture, the speaker commenced his remarks by a cursory examination of the cometary worlds. Comets are bodies that move in space, and like the planets, are under the influence of the sun's attraction. To the naked eye they appear like a star with a long streaming tail. The peculiarities which mark their flight, the suddenness with which they blaze forth, their exceeding velocity and terrific appearance, and their eccentric motions have rendered them objects of terror and dread in all ages of the world. The comets perform their revolutions in orbits of every possible eccentricity, and moving indifferently in accordance with or opposed to the general motions of the planets. Many hundreds of comets are known to exist, and the regular periods at which many of them approach the sun have been accurately calculated. The one called Halley's comet, so named after the astronomer who first calculated its period of revolution, approaches the sun once in 76 years, its last appearance having been in 1835. Halley predicted, or rather precalculated the time of its periodic revolution more than one hundred years ago, and the appearance of this comet, at two distinct times, precisely as calculated by Halley, has not only verified his figures, but has been considered also a mighty verification of the science of astronomy. The periods of time occupied in the revolution of comets vary. The shortest known period of any comet's revolution is three and a half years, while others appear only once in 3000 years. The great comet of 1811 was remarkable for its beauty and exceeding brilliancy, the tail was calculated to have been 100,000,000 miles in length. The comet of 1680 had a train which was 112,000,000 miles long, the comet of 1769 had a tail 44,000,000 miles in length, and that of 1744 was 8,000,000 miles, this latter comet having six separate and brilliant tails. In order to have a definite idea of the immense orbits in which these bodies revolve, we may remark that several of these comets whose periods of revolution occupy more than 3,000 years, are known to travel at the rate of more than 1,000,000 miles an hour, at their perihelion passage, although this velocity is somewhat diminished on approaching their aphelion or greatest distance from the Sun. Figures are useless in any attempt to reckon the enormous space passed over by these bodies. Passing over the questions raised as to the nature of the matter composing these bodies, or the probable effect which would result from their collision with the earth, he passed on to examine the eclipses of the sun and moon.

An eclipse of the sun is caused by the interposition of the body of the moon between the sun and the earth, when she throws a shadow over part of the earth; this can only happen when the moon is in conjunction, or at the time of new moon. Owing to the superior size of the sun the shadow is conical. An eclipse of the sun may be partial or total. An eclipse of the moon, if central, must be total, but not so with the sun. This latter body may have a central eclipse which is not total. Hence there are annular eclipses, when a ring of light appears round the edge of the moon during an eclipse of the sun. This kind of eclipse is occasioned by the moon being at her greatest distance from the earth at the time of the eclipse. A central eclipse of the sun is total only when the moon is nearest the earth at the time of its occurrence, and it, consequently, is rarely seen. When it does occur the darkness lasts only some five or six minutes. A partial eclipse of the sun happens when the moon passes a little above or below the plane of the earth's orbit. The number of eclipses in any year cannot be less than two, and both those of the sun; nor can there ever be more than seven; in which case there will be five of the sun and two of the moon. The most usual number is four in a year, two of each luminary.

An eclipse of the moon is occasioned by the interposition of the earth between the sun and the moon. This takes place only at the time of full moon. If the moon always moved in the path of the earth she would suffer total eclipse at each full moon, but, owing to the inclination of the moon's orbit there cannot be more than three lunar eclipses, and there may not be any. These may be partial or total. If the moon passes fully through the earth's shadow, the eclipse will be total, and, as the earth is considerably larger than the moon, the eclipse may last for

three or four hours. A partial eclipse happens when, instead of passing fully through the shadow of the earth, the moon rises a little above or sinks a little below it. By knowing exactly the distance of the moon from the earth, the width of the earth's shadow at that distance, and the rate of the moon's progress in her orbit, eclipses have been calculated accurately years before they happen.

Let me now speak for a while of the *Oceanic Tides*, in which the sun and moon perform an active part. The tides are those regular movements of the sea, whereby it rises and falls on its shores twice in twenty-four hours. These tides are governed by fixed laws, and are caused by the attractive power of the sun and moon. The moon exercises a larger influence on the tides, on account of its greater proximity to the earth, the attractive power always decreasing as the distance increases: The sun raises a tide only one third the height which the moon does. The highest tides happen when the sun and moon are either in conjunction (new moon) or in opposition (full moon). These are called the *Spring Tides*. When the moon has half of its illuminated side turned towards the earth, we have the *Neap Tides*, because the sun and moon, acting in contrary directions, partially counteract each other's influence.—The tides are less high in open seas than in wide-mouthed rivers opening towards the stream tide. Thus, at the mouth of the Indus, the rise and fall of the water is thirty feet. Lakes and inland seas are not subjected to tides. Air being lighter than water, astronomers are of opinion that the moon raises higher tides in the air than in the sea.

Let me now briefly speak of the great laws by which the planetary system is governed and controlled in their revolutions round the sun. The celebrated German astronomer, Kepler, discovered that three uniform laws governed the solar system, which has been named after him "Kepler's Laws." They are as follows.—1st—"The Path of the planets round the sun is an ellipse, the sun being in one of the foci." By this law, combined with the second (given below) the place of any planet can be predicted at any given time. 2nd—"The angular velocity of a planet's movement in its orbit is inversely as the squares of its distance from the sun." 3rd—"The squares of the periodic times of any two planets are to each other as the cubes of their mean distances from the sun." This last law shortens the labor of observation, as in the case of *Uranus* and *Neptune*. When their distances were found, the period of their revolution was easily determined by this law without waiting for them to go around the sun.—These planets have not been round the sun since their discovery, and yet, immediately after their discovery, their periods of revolutions were ascertained. These laws are the bases for predicting the future courses of the planets, as also that of their satellites and the comets.

We shall now examine, in a few words, the laws of Attraction, which are the cause of, and explain, the celestial motions and the periods and forces by which the planets are sustained. Attraction of gravitation is the power by which bodies in general tend towards each other; this attraction is proportionate to the quantity of matter they contain. These principles were first discovered by the celebrated astronomer, Sir Isaac Newton. It is by these laws that the sun attracts the earth and all the other planets towards himself, and they, in turn, gravitate towards the sun. One of the laws of gravitation, "that bodies attract one another with forces proportional to the quantity of matter they contain;" another law is, "that attraction decreases as the squares of the distance from the centre increases." The attractive power of the sun is, in a measure, counteracted by what is called the *projectile force*, which is the tendency of bodies to move in straight lines. The union of these two forces, viz., the attractive and the projectile, gives to the planets a circular or elliptical orbit, and they are thus retained in their courses round the Sun.

Here the lecturer begged permission to make a short digression; and, addressing himself particularly to the Chairman and his countrymen present, he said that in astronomy, as well as in every other department of human knowledge, Ireland is keeping pace with the world, and in the middle ages was actually in advance of it in the science of astronomy. For we find that when the rest of Europe, through ignorance or forgetfulness, had no knowledge of the real figure of the earth, its rotundity and true formation was taught in the Irish schools. Thus as early as the eighth century, over seven hundred years before the birth of Copernicus, Feargal, an Irish priest, wrote a very learned treatise on the sphericity of the earth, and the existence of our antipodes. This Feargal was much honored by Pepin, King of France, for his great learning. Again, in the ninth century, Dungal, the Recluse, an Irish monk, wrote, at the special request of the Emperor Charlemagne, a letter on two eclipses of the sun in 810, which shows great ability and research, and proves to us that astronomy was cultivated with great ardor by our forefathers. I could mention the names of many others, but time will not permit; I shall therefore close with referring to an illustrious Irishman of the present day—the Earl of Ross. This excellent nobleman has constructed on his estate in Ireland, the largest and most magnificent telescope ever made. The tube of this monster telescope is 56 feet long and 6 feet in diameter. Some idea may be formed of its enormous size from the fact, that an ordinary sized man walked through the tube with ease and even with his umbrella spread. The construction of this instrument cost Lord Ross nearly £20,000; and every part of it was made on his own estate, and under his Lordship's immediate superintendance; for it is worthy of note, that Lord Ross is a resident Irish landlord, and spends his vast income among those who produce it. The wonderful power of this gigantic telescope has resolved into stars many nebulae which had been previously supposed to be simply patches of luminous matter in the sky. And objects on the moon's surface, the size of our public buildings, are with this instrument distinctly seen, as it brings the moon within about 50 miles of us. With this short digression we shall resume our subject.

Let us now take a brief view of the sidereal heavens, or the regions of the fixed stars. All the heavenly bodies beyond our system are called "fixed stars," because, with few exceptions, they never appear to move or change their relative positions, as do the planets. The fixed stars are distinguished by their twinkling light, as the fixed stars twinkle and the planets do not. These bodies are supposed to be so many separate centres of light and heat, like our own sun, to different systems of planets. The number of fixed stars visible to the naked eye is about 1000; but, when the telescope is swept over the heavens, we see millions of stars in the firmament. The stars seen with the naked eye are divided into six different classes, according to their magnitude. The most brilliant are called stars of the first magnitude; those next in brilliancy are stars of the second magnitude, &c. By the telescope, stars are to be seen which rank as low as the sixteenth magnitude. Some of the more conspicuous of the fixed stars, when seen through an instrument, are found to consist of two or more stars, which revolve about each other in regular periods of time, some of which extend to hundreds of years. Of these double stars, it is often found that one of them exceeds the other in brilliancy, and sometimes shines with a different colored light; some are blue, others are red, and others, again, are green. Astronomers have mapped out the heavens into 48 constellations, of which 48 were formed by the ancients. The fixed stars are unequally scattered over the sky, and appear to us of different degrees of magnitude, but all at one distance, and to the naked eye the most distant fixed star appears no farther off than of the planets. But, by the aid of the telescope, we find that the nearest of the fixed stars is not less than 11,000 times the distance of Uranus (1,820,000,000 miles distant) from the sun. The only means which astronomers have of measuring their distance is by what is called "parallax motion," and this is so small, that